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AF
Docket No.: 600.1243
Date: August 6, 2007

IFW

In re application of: **Bertold GRUETZMACHER et al.**
Serial No.: 10/655,928
Filed: September 5, 2003
For: **PRINT SUBSTRATE-CONTACTING ELEMENT HAVING AN INK-REPELLENT COATING AND METHOD FOR COATING A PRINT SUBSTRATE-CONTACTING ELEMENT**

Sir:

Transmitted herewith is an **Appellants' Reply Brief Under 37 C.F.R. §41.41 (6 pgs)** in the above-identified application.

- ☒ Also transmitted herewith are:
☐ Petition for extension under 37 C.F.R. §1.136
☒ Other: **Return Receipt Postcard**
- ☐ Check(s) in the amount of **\$0.00** is/are attached to cover:
☐ Filing fee for additional claims under 37 C.F.R. §1.16
☐ Petition fee for extension under 37 C.F.R. §1.136
☐ Other:
☐ Other:
- ☒ The Assistant Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0552.
- ☒ Any filing fee under 37 C.F.R. §1.16 for the presentation of additional claims which are not paid by check submitted herewith.
- ☒ Any patent application processing fees under 37 C.F.R. §1.17.
- ☒ Any petition fees for extension under 37 C.F.R. §1.136 which are not paid by check submitted herewith, and it is hereby requested that this be a petition for an automatic extension of time under 37 CFR §1.136.

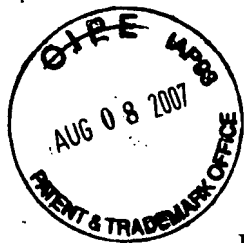

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I hereby certify that the documents referred to as attached therein and/or fee are being deposited with the United States Postal Service as "first class mail" with sufficient postage in an envelope addressed to "Mail Stop: APPEAL BRIEF - PATENTS Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on August 6, 2007.

DAVIDSON, DAVIDSON & KAPPEL, LLC

BY: 
Jennifer L. O'Connell



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Re: Application of: Bertold GRUETZMACHER et al.
Application No.: 10/655,928
Filed: September 5, 2003
Art Unit: 2854
Examiner: Kevin D. Williams
Attorney Docket No.: 600.1243
Title: **PRINT SUBSTRATE-CONTACTING ELEMENT
HAVING AN INK-REPELLENT COATING AND
METHOD FOR COATING A PRINT SUBSTRATE-
CONTACTING ELEMENT**

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Alexandria, VA 22313-1450

August 6, 2007

APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41

Sir:

Appellants submit this Reply Brief for consideration of the Board of Patent Appeals and Interferences (the "Board") in response to the Examiner's Answer dated June 5, 2007 and in support of their appeal of the Final Rejection dated November 25, 2005. Appellants respectfully reassert each of the arguments asserted in Appellants' Brief dated January 31, 2007, and provide herein only a rebuttal of several of the arguments raised in the Examiner's Answer.

No fee is believed required. If any fee is required at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

ARGUMENTS

The following additional remarks are submitted for consideration by the Board under 37 CFR §41.41.

Rejections under 35 U.S.C. §102(b)

Claims 1 to 3

Claims 1 to 3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Gross, U.S. Patent No. 6,649,266.

Gross discloses substrate provided with a microstructured surface, methods of producing them, and to their use as having dirt repellency proprieties. (Col. 1, lines 5 to 9).

Claim 1 recites a print substrate-contacting element comprising:

a microstructured carrier having a surface; and

an ink-repellent coating on the surface of the microstructured carrier, the ink-repellent coating including a derivative of an amphiphilic organic compound having a polar region with an acidic character.

Gross does not disclose “a derivative of an amphiphilic organic compound” as in claim 1. As referenced in the Examiner’s Answer on page 7, Gross discloses “organic compounds that may be used... styrene, acrylic acid, methacrylic acid and derivatives thereof (e.g. esters, amides, nitrites). These organic compounds may additionally carry further functional groups, examples being OH groups.” (Col. 5, line 46 to 51). The organic compounds described are not “amphiphilic organic compound having a polar region with an acidic character” as claimed.

The Examiner’s Answer asserts that the “presence of an OH group in a functionalized manner is indicative of amphiphilic and acidic properties” and subsequently concludes Gross’s disclosure of OH groups “teaches that the organic compounds are amphiphilic and have a polar region with an acidic character.” However, the assertion in the Examiner’s Answer is not true. The presence of one or more OH groups does not mean that a molecule is amphiphilic having a polar region. Furthermore, OH groups may be acidic or basic depending upon the rest of the molecular structure. Claim 1 recites a derivative of an amphiphilic organic compound, where the polar region of the organic compound is acidic. No such compound is disclosed in Gross.

Moreover, even if the groups yielded amphiphilic components, they were only components which undergo structural and functional changes in the condensation reaction.

There is no disclosure in Gross that the actual condensate is an amphiphilic organic substance. The Examiner's Answer cites Gross at column 5, lines 35 to 42, however, Gross is referring to the coating composition, not the actual coating on the substrate after the coating composition has been applied to the substrate and the coating has been formed.

Withdrawal of the rejection of claim 1 and its dependent claims 2 and 3 is respectfully requested.

Rejections under 35 U.S.C. §103(a)

Claims 1 to 4 and 7 to 9

Claims 1 to 4 and 7 to 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wirz, U.S. Patent No. 5,479,856 in view of Gross and further in view of Mohr, U.S. Patent No. 4,427,766.

Wirz discloses printing units having a respective impression cylinder and four pairs of blanket and plate cylinders respectively. Each blanket cylinder/plate cylinder pair is associated with an inking unit and with a device for texturing and structuring a printing plate disposed on a plate cylinder. (Col. 5, Lines 25 to 33).

Gross is discussed above.

Mohr describes a printing plate and states that the form prepared according to Example 26 has similar properties to polyvinylphosphonic acid, but does not disclose the acid in Example 26 and refers to German Patent No. 1,134,093. A copy of the German patent and its US equivalent (U.S. Patent No. 3,276,868) are of record. The phosphonic acid layer referred to by the German patent is an intermediate layer (see claim 1 of U.S. Patent No. 3,276,868) and also only for a printing plate.

Claim 1 recites a print substrate-contacting element comprising:

a microstructured carrier having a surface; and

an ink-repellent coating on the surface of the microstructured carrier, the ink-repellent coating including a derivative of an amphiphilic organic compound having a polar region with an acidic character.

Wirz does not disclose "a microstructured carrier" as claimed. Rather the ink repellent surface is the impression cylinder. Gross does disclose a "microstructured" surface, however there is no motivation to modify Wirz in view of Gross as they are not in related technologies.

Furthermore, Wirz and Gross fail to disclose “derivative of an amphiphilic organic compound having a polar region with acidic character” as claimed. Mohr’s reference to the phosphonic acid in the German patent is an intermediate layer and only for a printing plate. There is no motivation for one of ordinary skill in the art to modify Wirz in view of Mohr. One of ordinary skill in the art would not have used printing plate teachings for the impression cylinder of Wirz, since the impression cylinder of Wirz does not provide any image.

Moreover, Mohr teaches away from using polyvinylphosphonic acid in example 26. Example 26 in Mohr does not use polyvinylphosphonic acid, and yet obtains the same copying properties and “improved ink-repellent action of the non-image areas” as a support treated with polyvinylphosphonic acid in German Patent No. 1, 134,093. (See col. 17, lines 17 to 21). Thus, Mohr teaches away from using polyvinylphosphonic acid.

Withdrawal of all of the rejections is respectfully requested.

Claims 5 and 6: Argued Separately

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wirz in view of Gross and Mohr as applied to claims 1 to 4 and 7 to 9, and further in view of Boardman, U.S. Patent No. 6,824,882.

Boardman teaches fluorinated phosphonic acids.

Claim 5 recites the print substrate-contacting element as recited in claim 1 wherein the derivative of the amphiphilic organic compound is substituted in a nonpolar region so as to be both ink-repellent and water-repellent.

The Examiner’s Answer attempts to modify Wirz in view of Gross, Mohr and Boardman. Wirz and Gross do not teach the limitations for the reasons stated above and Mohr and Boardman do not cure these defects.

Claim 6 recites the print substrate-contacting element as recited in claim 1 wherein the derivative of the amphiphilic organic compound is fluorinated in a nonpolar region.

Wirz, Gross and Mohr fail to show or teach “fluorinated in a nonpolar region.” There would have been no motivation for a person of ordinary skill in the art to modify Wirz in view of Boardman. Furthermore, it would not have been obvious to one of skill in the art to combine the fluorinated phosphonic compounds in Boardman with Mohr since Mohr teaches away from using phosphonic acid in example 26.

Withdrawal of the rejections to claims 5 and 6 for these reasons as well those mentioned above is respectfully requested.

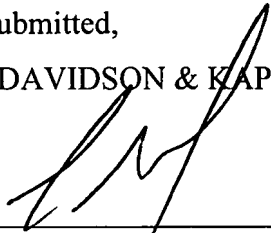
CONCLUSION

It is respectfully submitted that the application is in condition for allowance. Favorable consideration of this Reply Brief is respectfully requested.

Respectfully submitted,

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